

Pest Update (July 31, 2013)

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John Ball, Forest Health Specialist SD Department of Agriculture,
Extension Forester SD Cooperative Extension

Email: john.ball@sdstate.edu

Phone: office 605-688-4737, cell 605-695-2503

Samples sent to: John Ball
Plant Science Department
rm 230, Agriculture Hall, Box 2207A
South Dakota State University
Brookings, SD 57007-0996

Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent from any location – please provide a picture!**

Available on the net at:

<http://sdda.sd.gov/conservation-forestry/tree-pest-alerts/>

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

Timely topics

Plant development..... 2

E-samples

Mulberry identification..... 2

Lecanium scale..... 2

Pine needle scale..... 3

Sawyer beetles in pines..... 3

Samples received

Brown County (apple scab)..... 3

Brule County (apple scab)..... 3

Perkin County (spider mites on spruce)..... 4

Perkin County (Diplodia tip blight on pine)..... 4

Timely Topics

Plant development



The hydrangeas are still in full bloom, very typical for this time of year. They do not look too happy about flowering during the heat (though these last couple of weeks of cool, moist weather has dramatically improved them) and since hydrangeas are known as “water pigs” – keep the hose on them!

E-samples



leave the fruit to the birds who deposit the seeds everywhere.

Every year about this time I received a few samples of **white mulberry** (*Morus alba*) and usually the Tartarian (Russian) variety (*Morus alba var tatarica*). This is a very common tree in South Dakota, not so much from being planted by people but from birds. The tree, which can become more than 30 feet tall in our state, has three different leaf shapes, unlobed, one lobe (like a mitten) or even two lobes and all three leaf shapes can occur on the same tree much to the puzzlement of the person trying to identify the plant. The reason I receive samples during late July is the fruit that is beginning to ripen. The fruit is a purplish-violet multiple achene about ½ inches long that resembles a blackberry. The fruit is not as flavorful and while it can be made into jams and wines, most folks



about now, but rarely does an infestation seriously harm a tree. The best management is often to ignore it and let their natural enemies do their work. Small trees can be treated with insecticidal soap in late June to kill the mobile crawlers or an insecticide containing imidacloprid as the active ingredient can be applied as a soil drench in September to kill the insects as they feed.

Lecanium scales are very noticeable on many elms and maples in the state. The female scale appears as a reddish brown hard bump attached tightly to the twigs, branches and young trunks of trees. Lecanium scale is a soft scale meaning they produce honeydew, a sticky substance that can cover the leaves and anything else under the tree. The honeydew is usually colonized by sooty mold, which causes the “dew” to be covered with a black powder. Usually the leaves on the infested branches or trees will turn color prematurely, usually



Pine needle scale is an insect that I can find on many Austrian and mugo pines in our state as well as an occasional ponderosa pine and rarely on Scotch pine. The female scale resembles a small white bump on the needles. Heavy infestations can make the tree appear almost a flocked Christmas tree. The insect rarely

causes serious injury to the host but heavy infestations, more than 4 live scales per needle, can result in the needle discoloration. The pine needle scale is an armored scale meaning it does not produce honeydew, the sticky substance excreted by soft scales. The best management option for tree owners is to either ignore the insect, natural enemies do a good job of keeping the population down, or spray with insecticidal soap in late May and mid-July when the crawlers have hatched and are moving about the plant. Once the crawlers settle and become immobile they produce a hard shell and most insecticide treatments become ineffective.



I still am receiving almost daily calls and emails from tree owners wondering what is killing their mature pines and spruce. As has been mentioned in the *Update* several times already this year the overwhelming stress on these conifers has been the drought that began during the summer of 2011 and did not end until the spring of 2013. This stress, in combination with the warm, dry winter of 2011-12, was sufficient to kill or weaken many

trees. Now we are seeing a multitude of secondary stresses in these trees and a good example are the **sawyer (longhorned) beetles** that can be found burrowing beneath the wood of dying trees. These insects are attracted to dying trees, they are not the reason the trees are dying. Water a year ago, not a spray now, is what would have saved these trees.

Samples received

Brown County

Why are the leaves on this Honeycrisp apple tree turning brown?

The problem is apple scab, a very common disease of apples and crabapples, and it was discussed in the last issue of the *Update* and also see below.

Brule County (FL1300022)

What are these 40 year old apple trees dying?

The foliage included in the sample was infected with apple scab. This disease is very common apples and crabapples of all ages through there are

varying degrees of infection depending on the cultivar. Some trees such as 'State Fair' seem to become infected every year while others, 'Honeycrisp' comes to mind, I rarely see problems unless we have a very wet and cool spring (like this past one). The management of apple scab was covered in the last Update.

The dieback in your mature trees is not due to apple scab but possible black rot, fireblight, or other canker disease; without seeing the trees I cannot be sure which or even if there is some other issue.

Perkins County

What is wrong with this

Colorado blue spruce?

We have many issues with blue spruce in our state this year, most related to the recent drought, but in this case, the problem is also spider mite. This is a cool season mite, dormant now, but the debris and injury to the foliage. The best management may be just a high-pressure stream of water through the tree about the time deciduous trees are turning color this autumn. A spray of a pesticide containing tau-fluvalinate as the active ingredient will have some effectiveness on mites and this spray should be applied in the spring when the deciduous trees are just leafing out.

Perkins County

What is wrong with this

ponderosa pine? The new needles are stunted and the older ones turning brown or gray.

This is Diplodia tip blight, a fungal disease of pines that occurs throughout the state. Common symptoms are stunted new shoots and the older needles becoming brown or turning gray and hanging. The small black fruit bodies can be found later in the year as black dots beneath the papery sheaths at the base of the needles or on the cone scales. Management focuses on keeping the tree healthy, water when dry, and applying a fungicide containing copper or chlorothanil (and labeled for tip blight) just as the buds begin to open in the spring and repeat in 10 days.